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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,911	08/31/2001	James R. Curtis	10015681-1	8140

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EXAMINER

BONZO, BRYCE P

ART UNIT PAPER NUMBER

2114

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,911

Applicant(s)

CURTIS ET AL.

Examiner

Bryce P Bonzo

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,10-16,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 4,8,9,17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/31/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL OFFICIAL ACTION

Status of the Claims

Claims 1-3, 5-7, 10-16, 19 and 20 are rejected under 35 USC §102.

Claims 4, 8, 9, 17 and 18 are objected while containing allowable matter.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7, 10-16, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chrabaszcz (United States Patent Application Publication US 2001/005654 A1).

As per claim 1, Chrabaszcz discloses:

A process for providing High Availability applications in a Cluster environment comprising;

establishing a first instance of a Package for an application on a first Node of a Cluster (Figure 1, item 114);

establishing at least one second instance of the Package on at least one second Node of the Cluster (figure 1, item 116);

implementing the application on the first Node (Page 3, ¶38); and

transferring implementation of the application to the at least one second Node when a fault is detected on the first Node (page 3, ¶38: Initially, all users access a clustered application through the server identified in the object as being the primary server for that clustered application);

wherein each instantiation of the Package contains sufficient information to implement the application on any Node of the Cluster without requiring the first Node to fail-over the application to at least one of the at least one second Node (page 7, ¶69: If in step 606 it is determined that the preregistered application was previously manually unloaded by a system operator, the process moves to step 610 wherein the process resets the HOST attribute to equal the primary server ID value).

As per claim 2, Chrabaszczyk discloses:

wherein the application is a Cluster aware application. (page 4, ¶46).

As per claim 3, Chrabaszczyk discloses:

wherein the Package contains information necessary for the application to be implemented on a Node of the Cluster (page 4, ¶40).

As per claim 5, Chrabaszcz discloses:

wherein the application further comprises a database application (Page 4, ¶43).

As per claim 6, Chrabaszcz discloses:

wherein the application further comprises a volume management service (Page 9, ¶75: An object dismount is accomplished by the backup server through the cooperative interaction of data manager module 528 and Vol-Lib module 512. [See FIG. 5] Control then passes to process 870. In process 870, the backup server deactivates the object. Control is then passed to splice block E in which the processing of the next object is initiated).

As per claim 7, Chrabaszcz discloses:

wherein the Package is loaded onto every Node of the Cluster (Figure 1, item 114, 16).

As per claim 10, Chrabaszcz discloses:

wherein the fault condition is detected for the application on the first Node by a Cluster management system (Page 6, ¶60: When the Netframe Cluster software is able to interact with the application program to control the cluster processes, as is the case with cluster aware applications, the failback, as well as the failover, process occurs smoothly and efficiently with less delay when compared to similar processes for cluster capable applications).

As per claim 11, Chrabaszcz discloses:

wherein addition to monitoring the first Node for the fault, the Cluster management system also balances a load across the Cluster by transferring applications to be performed by the Cluster between the first Node and the at least one second Node Page 7, ¶¶69).

As per claim 12, Chrabaszcz discloses:

wherein the process of transferring implementation responsibility occurs without requiring the first Node to fail-over the application to any of the at least one additional Node (page 7, ¶¶69).

As per claim 13, Chrabaszcz discloses:

A system utilized to provide High Availability to an application comprising:
a first Node containing a Package, the Package providing information utilized to implement an application on a Cluster (Figure 1, item 14);
at least one second Node containing a second instantiation of the Package (Figure 1, item 116); and
a Cluster management system utilized to monitor the operation of the application on the first Node (Page 6, ¶¶60);
whereupon detecting a fault condition in the implementation of the application on the first Node, the Cluster management system transfers implementation of the

application to the at least one second Node (page 3, ¶38),

wherein the at least one second Node utilizing the second instantiation of the Package to implement the application (page 3, ¶23), and

wherein the transfer of the application from the first Node to the at least one second Node occurs without the application having to fail-over (page 7, ¶69).

As per claim 14, Chrabaszcz discloses:

wherein the application further comprises a database application (page 4, ¶43).

As per claim 15, Chrabaszcz discloses:

wherein the application is Cluster aware (page 4, ¶43)

As per claim 16, Chrabaszcz discloses:

wherein an instantiation of the Package is instantiated on every Node of the Cluster (Figure 1, item 114/116).

As per claim 19, Chrabaszcz discloses:

establishing a first instance of the Package for the application on the first Node of the Cluster (figure 1, item 114);

establishing at least one second instance of the Package on the second Node of the Cluster (figure 1, item 116);

implementing the application on the first Node (Page 3, ¶38); and

transferring implementation of the application to the second Node when a fault is detected on the first Node (Page 3, ¶38);

wherein each instantiation of the Package contains sufficient information to implement the application on any Node of the Cluster without requiring the first Node to fail-over the application to the second Node (Page 7, ¶69).

As per claim 20, Chrabaszcz discloses:

implementing an application on first Node of a Cluster, wherein the first Node and at least one additional Node on the Cluster include a Package containing information needed to implement the application on the Cluster (Figure 1, items 114/116); and

transferring implementation responsibility of the application from the first Node to the at least one additional Node when a fault condition is detected for the application on the first Node.(Page 3, ¶38).

Allowable Matter

Claims 4, 8, 9, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter. The matter which overcomes the prior art of record is italicized:

As per claim 4:

wherein the application is initially not Cluster aware and the process further comprises generating a Cluster aware Package for the application.

As per claims 8, 9, 17 and 18:

wherein the Package is loaded on to less than every Node of the cluster.

Response to Arguments

Applicant has argued Chrabaszcz does not disclose “without requiring the first node to fail over the application.” Chrabaszcz discloses manually unloading of an application. Applicant asserts this is a fail over. The Examiner disagrees. Applicant cites a portion of text and states that the manual unloading must be a fail over. However, that same portion of text contains three possible causes: 1) manual unloading, 2) primary failure alone, and 3) failure of both primary and backup nodes. Clearly if the manual unloading was a failure, it would fail into one of the other two categories and as such would not warrant special treatment.

Applicant has argued that Chrabaszcz does not disclose “application failure.” Applicant further states the failure is that of the server software. If the server running an application fails, the application running on the server will fail along with the supporting server software. Proof of this is the use of heartbeats throughout Chrabaszcz. If the fundamental server software is either hung or completely served from a network, then the applications on the server WILL have the hung or been severed from the network.

Final Disposition

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2114

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bryce P Bonzo
Examiner
Art Unit 2114